Psychopharmacolo

Volume 111 1993

For North America and South America

Clinical psychopharmacology

Field editors

D.E. Casey, Portland

Advisory editors

B. Cohen, Belmont

R. Poland, Torrance

Human cognitive psychopharmacology

Field editors

B.J. Spring, North Chicago

Advisory editors

R. Block, Iowa City

E. Gamzu, Cambridge

T. Roehrs, Detroit

H. Weingartner, Washington DC

Alcohol and substance abuse in humans

Field editors

H. de Wit, Chicago

Advisory editors G. Bigelow, Baltimore

S.S. O'Malley, New Haven

Biochemical neuropharmacology, drug metabolism and pharmacokinetics

Field editors

D.R. Sibley, Bethesda

Advisory editors I. Creese, Newark

I. Kopin, Bethesda

J.M. Perel, Pittsburgh

E. Sanders-Bush, Nashville

Behavioral pharmacology in laboratory animals

Field editors

K.A. Miczek, Medford

Advisory editors

R.L. Balster, Richmond

J.E. Barrett, Bethesda

H. Barry III, Pittsburgh

J. Bergman, Southborough

S.G. Holtzman, Atlanta

H. Kalant, Toronto

Preclinical psychopharmacology

Field editors

M.A. Geyer, La Jolla

Advisory editors S.D. Glick, Albany

K.F. Killam, Davis

G.F. Koob, San Diego

S.B. Sparber, Minneapolis

R.A. Wise, Montreal

For the rest of the world

J. Gerlach, Roskilde

P. Bech, Hillerød

W.F. Gattaz, Mannheim

O. Lingjaerde, Oslo

E.S. Paykel, Cambridge

D.M. Warburton, Reading

I. Hindmarch, Guildford

B.J. Sahakian, Cambridge

K. Siegfried, Frankfurt

D.M. Warburton, Reading

I. Hindmarch, Guildford

B.J. Sahakian, Cambridge

K. Siegfried, Frankfurt

J. Leysen, Beerse

J. Heykants, Beerse

J. Hyttel, Copenhagen-Valby

C.A. Marsden, Nottingham

T.W. Robbins, Cambridge

W. Koek, Castres

B.J. Everitt, Cambridge

A.J. Goudie, Liverpool

J. Scheel-Krüger, Roskilde

I.P. Stolerman, London

A.R. Green, London

G. Di Chiara, Cagliari

D.J. Heal, Nottingham

P. Jenner, London

P. Pascoe, Farnborough

J.L. Waddington, Dublin 2



Springer International

Psychopharmacology

This journal was founded as **Psychopharmacologia** in 1959 and was renamed **Psychopharmacology** beginning with Vol. 46 (1976).

The journal has been edited by the following Managing Editors:

Vol. 1 (1959), E. Rothlin and A. Wikler; Vol. 2 (1961), E. Rothlin and H. Isbell; Vol. 3 (1962), E. Rothlin and A. Wikler; Vol. 4 (1963)–Vol. 7 (1965), J.O. Cole and E. Rothlin; Vol. 8 (1965)–Vol. 16 (1969), J.O. Cole, E. Jacobsen, M.E. Jarvik, M. Shepherd; Vol. 18 (1970)–Vol. 27 (1972), J.O. Cole, E. Jacobsen, C. Kornetzky, M. Shepherd; Vol. 18 (1970)–Vol. 27 (1972), J.O. Cole, M. Hamilton, E. Jacobsen, C. Kornetzky; Vol. 28 (1973)–Vol. 35 (1974), J.O. Cole, M. Hamilton, E. Jacobsen, C. Kornetzky, R.W. Russell; Vol. 36 (1974)–Vol. 69 (1980), H. Barry III, J.O. Cole, M. Hamilton, T.W. Robbins, R.W. Russell.

Starting with Vol. 80 (1983) the Editors have been: H. Barry III, T.W. Robbins (Coordinating Editors), J.O. Cole, J. Gerlach, M. Hamilton, J. Leysen, F. Sulser. As of Vol. 85 (1985): H. Barry III, D.E. Casey, J.O. Cole, J. Gerlach, S.D. Glick, A.R. Green, M. Hamilton, J. Leysen, T.W. Robbins, F. Sulser. As of Vol. 92 (1987): H. Barry III, D.E. Casey, J. Gerlach, S.D. Glick, A.R. Green, J. Leysen, T.W. Robbins, B.J. Spring, F. Sulser, D.M. Warburton. As of Vol. 98 (1989): H. Barry III, D.E. Casey, J. Gerlach, S.D. Glick, A.R. Green, J. Leysen, T.W. Robbins, D.R. Sibley, B.J. Spring, D.M. Warburton. As of Vol. 106 (1992): D.E. Casey, J. Gerlach, M.A. Geyer, A.R. Green, J. Leysen, K.A. Miczek, T.W. Robbins, D.R. Sibley, B.J. Spring, D.M. Warburton, H. de Wit.

Copyright

Submission of a manuscript implies: that the work described has not been published before (except in the form of an abstract or as part of a published lecture, review or thesis), that it is not under consideration for publication elsewhere; that its publication has been approved by all coauthors, if any, as well as by the responsible authorities at the institute where the work has been carried out; that, if and when the manuscript is accepted for publication, the authors agree to automatic transfer of the copyright to the publisher; and that the manuscript will not be published elsewhere in any language without the consent of the copyright holders.

All articles published in this journal are protected by copyright, which covers the exclusive rights to reproduce and distribute the article (e.g., as offprints), as well as all translation rights. No material published in this journal may be reproduced photographically or stored on microfilm, in electronic data bases, video disks, etc., without first obtaining written permission from the publisher.

The use of general descriptive names, trade names, trademarks, etc., in this publication, even if not specifically identified, does not imply that these names are not protected by the relevant laws and regulations.

While the advice and information in this journal is believed to be true and accurate at the date of its going to press, neither the authors, the editors, nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Special regulations for photocopies in the USA:

Photocopies may be made for personal or in-house use beyond the limitations stipulated under Section 107 or 108 of U.S. Copyright Law, provided a fee is paid. All fees should be paid to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, USA, stating the ISSN 0033-3158, the volume, and the first and last page numbers of each article copied. The copyright owner's consent does not include copying for general distribution, promotion, new works, or resale. In these cases, specific written permission must first be obtained from the publisher.

Printers: Universitätsdruckerei H. Stürtz AG, Würzburg © Springer-Verlag Berlin Heidelberg 1993 Printed in Germany

Contents of volume 111

No 1: pp 1-126 published April 1, 1993 No 2: pp 127-258 published May 4, 1993 No 3: pp 259-390 published June 4, 1993 No 4: pp 391-512 published July 1, 1993

Abdulla FA, Calaminici M-R, Stephenson JD, Sinden JD: Chronic treatments with cholinoceptor drugs influence spatial learning in rats 508

tial learning in rats 508

Akaike N → Himori N

Alleva E → Dell'Omo G

Amalric M → Ouagazzal A

Antelman SM → Caggiula AR

Antkiewicz-Michaluk L, Michaluk J, Romańska I, Vetulani J: Reduction of morphine dependence and potentiation of analgesia by chronic co-administration of nifedipine 457

Bahr C von → Yisak W

Bakish D, Bradwejn J, Nair N, McClure J, Remick R, Bulger L: A comparison of moclobemide, amitriptyline and placebo in depression: a Canadian multicentre study 389

Bakshi VP, Kelley AE: Striatal regulation of morphine-induced hyperphagia: an anatomical mapping study 207

Baldessarini RJ → Campbell A Bankson MG → Schenk S

Barnas C, Whitworth AB, Fleischhacker WW: Are patterns of benzodiazepine use predictable? A follow-up study of benzodiazepine users 301

benzodiazepine users 301

Barnes JC → Dennes RP

Baskin P → Steinpreis RE

Benavides J → Sanger DJ

Benkert O → Gründer G

Bennett SAL → Roberts DCS

Bickel WK → Higgins ST

Bickel WK → Kamien JB

Binstock W → Zacny JP

Birbaumer N → Pauli P

Black JE → McCance-Katz EF Blough PM → Bradley DV

Bolland BL → Kesner RP

Bolwig TG → Kragh J Bradley DV, Blough PM: Visual effects of opiates in pigeons. III. Luminance and wavelength sensitivity 117

Bradshaw CM → Wogar MA Bradwejn J → Bakish D Brody S → Pauli P

Bronson ME, Lin Y-P, Burchett K, Picker MJ, Dykstra LA: Serotonin involvement in the discriminative stimulus effects of κ opioids in pigeons 69

Büchel C → Gattaz WF Bulger L → Bakish D Burchett K → Bronson ME

Byrnes JJ, Miller LG, Greenblatt DJ, Shader RI: Chronic benzodiazepine administration. XII. Anticonvulsant crosstolerance but distinct neurochemical effects of alprazolam and lorazepam 91

Cabib S → Castellano C

Caggiula AR, Epstein LH, Antelman SM, Saylor S, Knopf S, Perkins KA, Stiller R: Acute stress or corticosterone administration reduces responsiveness to nicotine: implications for a mechanism of conditioned tolerance 499

Calaminici M-R → Abdulla FA

Callaway CW, Wing LL, Nichols DE, Geyer MA: Suppression of behavioral activity by norfenfluramine and related drugs in rats is not mediated by serotonin release 169

Callies A → Hatsukami D

Campbell A, Baldessarini RJ, Neumeyer JL: Altered spontaneous behavior and sensitivity to apomorphine in rats following pretreatment with S(+)-aporphines or fluphenazine 351

Capeless MA → Higgins ST

Carey MP, Fry JP: A behavioural and pharmacological evaluation of the discriminative stimulus induced by pentylenetetrazole in the pig 244

Carlezon WA, Wise RA Jr: Phencyclidineinduced potentiation of brain stimulation reward: acute effects are not altered by repeated administration 402

Carr KD, Papadouka V, Wolinsky TD: Norbinaltorphimine blocks the feeding but not the reinforcing effect of lateral hypothalamic electrical stimulation 345 Cassella JV → Hoffman DC

Castellano C, Cestari V, Cabib S, Puglisi-Allegra S: Strain-dependent effects of post-training GABA receptor agonists and antagonists on memory storage in mice 134

Cestari V → Castellano C

Cherek DR, Roache JD, Egli M, Davis C, Spiga R, Cowan K: Acute effects of marijuana smoking on aggressive, escape and point-maintained, responding of male drug users 163

Cnossen F → Jackson JL Coalson DW → Zacny JP

Cole BJ, Klewer M, Jones GH, Stephens DN: Contrasting effects of the competitive NMDA antagonist CPP and the non-competitive NMDA antagonist MK 801 on performance of an operant delayed matching to position task in rats 465

Cowan K → Cherek DR Crawford CA → McDougall SA Crook TH → McEntee WJ

Cross AJ, Misra A, Sandilands A, Taylor MJ, Green AR: Effect of chlormethiazole, dizocilpine and pentobarbital on harmaline-induced increase of cerebellar cyclic GMP and tremor 96

Cutter T → Zacny JP

Dakis M → Kesner RP
Damaj MI, Martin BR: Is the dopaminergic system involved in the central effects of nicotine in mice? 106

Davis C → Cherek DR

Dawson G → Stanhope KJ
Dell'Omo G, Wolfer D, Alleva E, Lipp H-P:

Dell'Omo G, Wolfer D, Alleva E, Lipp H-P: Impaired acquisition of swimming navigation in adult mice exposed prenatally to oxazepam 33

Dennes RP, Barnes JC: Attenuation of scopolamine-induced spatial memory deficits in the rat by cholinomimetic and non-cholinomimetic drugs using a novel task in the 12-arm radial maze 435

Depaulis A → Portavella M Dienstl E → Leblhuber F Donovan H → Hoffman DC Draper F → Stanhope KJ Dykstra LA → Bronson ME

Egli M → Cherek DR Ellinwood EH Jr → King GR Elmer GI → Miner LL Epstein LH → Caggiula AR

Fagerström KO, Schneider NG, Lunell E: Effectiveness of nicotine patch and nicotine gum as individual versus combined treatments for tobacco withdrawal symptoms 271

Farde L → Yisak W

File SE, Zangrossi H Jr, Viana M, Graeff FG: Trial 2 in the elevated plus-maze: a different form of fear? 491

Fleischhacker WW → Barnas C Flemming DC → Zacny JP Fredriksson G → Yisak W Fry JP → Carey MP Funada M → Narita M

Gattaz WF, Büchel C: Assessment of tardive dyskinesia by means of digital image processing 278

Gerhardt P, Hasenöhrl RU, Hock FJ, Huston JP: Mnemogenic effects of injecting RA-octil, a CE-inhibitor derivate, systemically or into the basal forebrain 442

Geyer MA → Callaway CW Gibbs S → Schenk S Glosten B → Zacny JP

Graeff FG → File SE Green AR → Cross AJ

Greenblatt DJ → Byrnes JJ

Gründer G, Wetzel H, Hammes E, Benkert O: Roxindole, a dopamine autoreceptor agonist, in the treatment of major depression 123

Haefely WE → Martin JR Hammes E → Gründer G

Hansen S: Effect of clonidine on the

responsiveness of infant rats to maternal stimuli 78

Harris JA, McGregor IS, Westbrook RF: Low and high doses of midazolam differentially affect hypoalgesia in rats conditioned to a heat stressor 62

Hasenöhrl RU → Gerhardt P

Hatsukami D, Huber M, Callies A, Skoog K: Physical dependence on nicotine gum: effect of duration of use 449

Hemby SE → Hooks MS Hepner BC → Pomerantz SM

Higgins ST, Rush CR, Bickel WK, Hughes

JR, Lynn M, Capeless MA: Acute behavioral and cardiac effects of cocaine and alcohol combinations in humans 285

Higgins ST → Kamien JB

Higley D → Schenk S

Himori N, Tanaka Y, Kurasawa M, Mishima K, Akaike N, Imai M, Ueno K, Matsukura T, Watanabe H: Dextrorphan attenuates the behavioral consequences of ischemia and the biochemical consequences of anoxia: possible role of Nmethyl-d-aspartate receptor antagonism and ATP replenishing action in its cerebro-protecting profile 153

Hock FJ → Gerhardt P

Hoffman DC, Donovan H, Cassella JV: The effects of haloperidol and clozapine on the disruption of sensorimotor gating induced by the noncompetitive glutamate antagonist MK-801 339

Hooks MS, Jones GH, Hemby SE, Justice JB Jr: Environmental and pharmacological sensitization: effects of repeated administration of systemic or intra-nucleus accumbens cocaine 109

Horger BA → Schenk S House DT → Schenk S Hsiao JK → Osman OT Huber M → Hatsukami D

Hughes JR → Higgins ST Hughes JR → Kamien JB

Humeniuk RE, White JM, Ong J: The role of GABA_B receptors in mediating the stimulatory effects of ethanol in mice 219

Huston JP → Gerhardt P

Hvyatiä P, Sinclair JD: Oral etonitazene and cocaine consumption by AA, ANA and Wistar rats 409

Imai M → Himori N

Jackson A → Stanhope KJ

Jackson HC, Nutt DJ: Investigation of the involvement of opioid receptors in the action of anticonvulsants 486

Jackson JL, Louwerens JW, Cnossen F, Jong HTP de: Testing the effects of hypnotics on memory via the telephone: fact or fiction? 127

Jatlow PI → McCance-Katz EF

Jenck F → Martin JR Jones GH → Cole BJ

Jones GH → Hooks MS

Jong HTP de → Jackson JL

Justice JB Jr → Hooks MS

Kamei C. Okumura Y. Tasaka K: Influence of histamine depletion on learning and memory recollection in rats 376

Kamien JB, Bickel WK, Hughes JR, Higgins ST, Smith BJ: Drug discrimination by humans compared to nonhumans: current status and future directions 259

Kelley AE → Bakshi VP

Kesner RP, Dakis M, Bolland BL: Phencyclidine disrupts long-but not shortterm memory within a spatial learning task 85

King GR, Kuhn C, Ellinwood EH Jr: Dopamine efflux during withdrawal from continuous or intermittent cocaine 179 Klemm WR: The catalepsy of blocked do-

paminergic receptors 251

Klewer M → Cole BJ Knopf S → Caggiula AR

Koelega HS: Stimulant drugs and vigilance performance: a review 1

Kosten TR → McCance-Katz EF

Kragh J, Seidelin J, Bolwig TG: Seizure threshold to lidocaine is decreased following repeated ECS (electroconvulsive shock) 495

Kuhn C → King GR Kurasawa M → Himori N

Leblhuber F, Neubauer C, Peichl M, Reisecker F, Steinparz FX, Windhager E, Dienstl E: Age and sex differences of dehydroepiandrosterone sulfate (DHEAS) and cortisol (CRT) plasma levels in normal controls and Alzheimer's disease (AD) 23

Leza J-C → San-Martin-Clark O

Lichtor JL → Zacny JP Lin Y-P → Bronson ME

Lipp H-P → Dell'Omo G

Lizasoain I → San-Martin-Clark O Lorenzo P → San-Martin-Clark O

Louwerens JW → Jackson JL Lunell E → Fagerström KO

Lynn M → Higgins ST

Marley RJ → Miner LL Martin BR → Damaj MI

Martin JR, Schoch P, Jenck F, Moreau J-L, Haefely WE: Pharmacological characterization of benzodiazepine receptor ligands with intrinsic efficacies ranging from high to zero 415

Masukawa Y, Suzuki T, Misawa M: Differential modification of the rewarding effects of methamphetamine and cocaine by opioids and antihistamines 139

Matsukura T → Himori N

McCance-Katz EF, Price LH, McDougle CJ, Kosten TR, Black JE, Jatlow PI: Concurrent cocaine-ethanol ingestion in humans: pharmacology, physiology, behavior, and the role of cocaethylene 39

McClure J → Bakish D

McDougall SA, Crawford CA, Nonneman AJ: Behavioral effects of selective and nonselective dopamine agonists on young rats after irreversible antagonism of D₁ and/or D₂ receptors 225

McDougle CJ → McCance-Katz EF

McEntee WJ, Crook TH: Glutamate: its role in learning, memory, and the aging brain 391

McGregor IS → Harris JA

McNamara C → Schenk S

Michaluk J → Antkiewicz-Michaluk L

Miczek KA → Vivian JA Miczek KA → Weerts EM

Miller LG → Byrnes JJ

Miner LL, Elmer GI, Pieper JO, Marley RJ: Aggression modulates genetic influences on morphine analgesia as assessed using a classical mendelian cross analysis 17

Misawa M → Masukawa Y

Misawa M → Narita M

Mishima K → Himori N

Misra A → Cross AJ Moreau J-L → Martin JR

Nagase H → Narita M

Nair N → Bakish D

Narita M, Suzuki T, Funada M, Misawa M, Nagase H: Involvement of δ -opioid receptors in the effects of morphine on locomotor activity and the mesolimbic dopaminergic system in mice 423

Neubauer C → Leblhuber F Neumeyer JL → Campbell A Nichols DE → Callaway CW Nieoullon A → Ouagazzal A Nilsson LB → Yisak W Nonneman AJ → McDougall SA

Nutt DJ → Jackson HC

Ogenstad S → Yisak W Okumura Y → Kamei C

Ong J → Humeniuk RE

Osman OT, Hsiao JK, Potter WZ: Dosedependent effects of intravenous alprazolam on neuroendocrine, biochemical, cardiovascular, and behavioral parameters in humans 295

Ouagazzal A, Nieoullon A, Amalric M: Effect of dopamine D₁ and D₂ receptor blockade on MK-801-induced hyperlocomotion in rats 427

Papadouka V → Carr KD

Pauli P, Rau H, Zhuang P, Brody S, Birbaumer N: Effects of smoking on thermal pain threshold in deprived and minimally-deprived habitual smokers 472

Peichl M → Leblhuber F

Perkins KA → Caggiula AR Picker MJ → Bronson ME

Pieper JO → Miner LL

Pomerantz SM, Hepner BC, Wertz JM: Serotonergic influences of male sexual behavior of rhesus monkeys: effects of serotonin agonists 47

Portavella M, Depaulis A, Vergnes M: 22-28 Khz ultrasonic vocalizations associated with defensive reactions in male rats do not result from fear or aversion 190

Potter WZ → Osman OT

Price LH → McCance-Katz EF Puglisi-Allegra S → Castellano C

Rau H → Pauli P
Reisecker F → Leblhuber F
Remick R → Bakish D
Richardson PJ → Vellucci SV

Richardson PJ → Vellucci SV Riekkinen M → Riekkinen P Jr

Riekkinen P Jr, Riekkinen M, Sirviö J, Riekkinen P: Effects of ZK 93426 on muscarinic and nicotinic antagonist or nucleus basalis lesioning-induced electrocortial slowing 195

Riekkinen P → Riekkinen P Jr

Rijnders HJ, Slangen JL: The discriminative stimulus properties of buspirone involve dopamine-2 receptor antagonist activity 55

Roache JD → Cherek DR

Roberts DCS: Self-administration of GBR 12909 on a fixed ratio and progressive ratio schedule in rats 202

Roberts DCS, Bennett SAL: Heroin selfadministration in rats under a progressive ratio schedule of reinforcement 215

Roe S → Stanhope KJ Romańska I → Antkiewicz-Michaluk L Rush CR → Higgins ST

Salamone JD → Steinpreis RE Sandilands A → Cross AJ

Sanger DJ, Benavides J: Discriminative stimulus effects of ω (BZ) receptor ligands: correlation with in vivo inhibition of [3 H]-flumazenil binding in different regions of the rat central nervous system 315

San-Martin-Clark O, Leza J-C, Lizasoain I, Lorenzo P: Changes induced by sodium cromoglycate on brain serotonin turnover in morphine dependent and abstinent mice 233

Saylor S → Caggiula AR

Schenk S, Valadez A, McNamara C, House DT, Higley D, Bankson MG, Gibbs S, Horger BA: Development and expression of sensitization to cocaine's reinforcing properties: role of NMDA receptors 332

Schneider NG \rightarrow Fagerström KO Schoch P \rightarrow Martin JR Seidelin J \rightarrow Kragh J

Shader RI → Byrnes JJ

Shaham Y: Immobilization stress-induced oral opioid self-administration and withdrawal in rats: role of conditioning factors and the effect of stress on "relapse" to opioid drugs 477

Sinclair JD → Hyyatiä P Sinden JD → Abdulla FA

Sirinathsinghji DJS → Vellucci SV

Sirviö J → Riekkinen P Jr Sjölander M → Thoren P

Skolnick P → Trullas R

Skoog K → Hatsukami D Slangen JL → Rijnders HJ

Smith BJ → Kamien JB

Spiga R → Cherek DR

Stanhope KJ, Roe S, Dawson G, Draper F, Jackson A: Effect of the benzodiazepine receptor agonist, zolpidem, on palatable fluid consumption in the rat 185 Steinparz FX → LebIhuber F

Steinpreis RE, Baskin P, Salamone JD: Vacuous jaw movements induced by sub-chronic administration of haloperidol: interactions with scopolamine 99

Stephens DN → Cole BJ

Stephenson JD → Abdulla FA Stiller R → Caggiula AR

Suzuki T → Masukawa Y

Suzuki T → Narita M

Szabadi E → Wogar MA

Tanaka Y → Himori N

Tasaka K → Kamei C Taylor MJ → Cross AJ

Thoren P, Sjölander M: Chlormethiazole attenuates the derangement of sensory evoked potential (SEP) induced by ICV administration of NMDA 256

Tornatzky W → Weerts EM

Trullas R, Skolnick P: Differences in fear motivated behaviors among inbred mouse strains 323

Ueno K → Himori N Usuda S → Wanibuchi F

Valadez A → Schenk S

Vellucci SV, Sirinathsinghji DJS, Richardson PJ: Adenosine A₂ receptor regulation of apomorphine-induced turning in rats with unilateral striatal dopamine denervation 383 Vergnes M → Portavella M Vetulani J → Antkiewicz-Michaluk L Viana M → File SE

Vivian JA, Miczek KA: Morphine attenuates ultrasonic vocalization during agonistic encounters in adult male rats 367

Wanibuchi F, Usuda S: Reply to Klemm 254

Watanabe H → Himori N

Weerts EM, Tornatzky W, Miczek KA: Prevention of the pro-aggressive effects of alcohol in rats and squirrel monkeys by benzodiazepine receptor antagonists 144

Wertz JM \rightarrow Pomerantz SM Westbrook RF \rightarrow Harris JA Wetzel H \rightarrow Gründer G

White JM → Humeniuk RE Whitworth AB → Barnas C

Wilson WH: Addition of lithium to haloperidol in non-affective, antipsychotic non-responsive schizophrenia: a double blind, placebo controlled, parallel design clinical trial 359

Windhager E → Leblhuber F Wing LL → Callaway CW Wise RA Jr → Carlezon WA

Wogar MA, Bradshaw CM, Szabadi E: Effect of lesions of the ascending 5-hydroxytryptaminergic pathways on choice between delayed reinforcers 239

Wolfer D → Dell'Omo G Wolinsky TD → Carr KD

Yisak W, Farde L, Bahr C von, Nilsson LB, Fredriksson G, Ogenstad S: Interaction study between remoxipride and biperiden 27

Zacny JP, Lichtor JL, Binstock W, Coalson DW, Cutter T, Flemming DC, Glosten B: Subjective, behavioral and physiological responses to intravenous meperidine in healthy volunteers 306

Zangrossi H Jr → File SE Zhuang P → Pauli P

Indexed in Current Contents, Psychological Abstracts and in Psyc INFO